### ASSISTANCE AGREEMENT QUARTERLY REPORT SUMMARY

for the reporting period April 13, 2001 through July 12, 2001

October 18, 2001

## St. Louis - Midwest Particulate Matter (PM) Supersite Monitoring Program

EPA Assistance ID No. R-82805901-0

#### Investigators and Institutions:

Dr. Jay Turner, PI Washington University, St. Louis, MO Dr. Judith Chow, Co-PI Desert Research Institute, Reno, NV Dr. Petros Koutrakis, Co-PI Harvard University, Cambridge, MA Dr. Peter McMurry, Co-PI University of Minnesota, Minneapolis, MN University of Maryland, College Park, MD Dr. John Ondov, Co-PI University of Wisconsin, Madison, WI Dr. James Schauer, Co-PI Dr. Warren White, Co-PI Washington University, St. Louis, MO Harvard University, Cambridge, MA Mr. George Allen

Dr. Tina Bahadori<sup>1</sup> Electric Power Research Institute, Palo Alto, CA

Dr. Edward Macias Washington University, St. Louis, MO Dr. Bret Schichtel<sup>2</sup> Washington University, St. Louis, MO Dr. John Watson Desert Research Institute, Reno, NV

Lead Institution: Washington University in St. Louis
Research Category: Particulate Matter Supersites Program
Project Period: January 13, 2000- January 12, 2004

Objective of Research:

This project will provide an atmospheric measurement study which is designed to address and integrate objectives of the atmospheric, health and exposure research communities.

# Progress Summary/Accomplishments:

Sixth quarter activities focused the installation of all remaining samplers and conducting routine measurements. The movable platform remained at the east St. Louis core site throughout this quarter to provide extensive collocated data for assessing measurement precision.

Data capture from a field operations perspective for the May-June period for selected semicontinuous instruments was as follows: Andersen aethalometer - 98%; HSPH sulfate - 98%; Andersen CAMMS mass - 94% and 83% with at least one CAMMS operational for 99% of the hourly records; and Sunset OCEC - 41% (Level II validated data in this case). Data capture for the Sunset OCEC units should improve as the study progresses and additional field experience is gained with these recently-commercialized units.

.

<sup>&</sup>lt;sup>1</sup> Current affiliation: American Chemistry Council, Washington, D.C. (Dr. Alan Hansen is currently serving as the official EPRI liaison to the St. Louis Supersite)

<sup>&</sup>lt;sup>2</sup> Current affiliation: NPS-CIRA, Fort Collins, CO

# St. Louis - Midwest Fine Particulate Matter Supersite

#### Publications/Presentations:

A project overview briefing was presented at the 2001 Midwest Transportation Planning Conference, Moline, IL, May 16-18, 2001.

## Future Activities:

The seventh quarter will feature sustained routine measurements at the East St. Louis core site, and the first deployment of the movable platform to the rural (Park Hills, MO) site. The St. Louis Team will hold a data analysis meeting in Fall 2001.

## Supplemental Keywords:

particulate matter, PM-2.5, monitoring, air quality

Relevant Web Sites: St. Louis - Midwest Supersite: http://capita.wustl.edu/StLSuperSite